

**STYLOPOMIRIS, A NEW GENUS AND THREE SPECIES OF
ECCRITOTARSINI (HETEROPTERA: MIRIDAE: BRYOCORINAE)
FROM VIET NAM AND MALAYA**

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Abstract.—The genus *Stylopomiris* and the included species *froeschneri*, *indochinensis*, and *malayensis* are described as new. The male genitalic structures of all species are illustrated, and a dorsal habitus provided for the female of *malayensis*. Scanning electron micrographs of the metaepisternal scent efferent system and the pretarsal structure document the placement of the genus in the tribe Eccritotarsini.

An ongoing study of the Eccritotarsini of the Old World has revealed three undescribed, congeneric species that cannot be placed in any known genus of the tribe. In the present paper, I describe the genus *Stylopomiris* and the included species *froeschneri*, *indochinensis*, and *malayensis* as new. The first species is named in honor of Richard C. Froeschner in recognition of his contributions to the study of Heteroptera and service as curator of Hemiptera at the National Museum of Natural History, Washington, D.C.

Stylopomiris, new genus

Diagnosis. Recognized by the broad head with moderately to strongly stalked eyes (Fig. 1); short, thin antennae; long labium; large, single cell of hemelytral membrane with strong loop-like apex (Fig. 1); and by the structure of the male genitalia, especially the broad right paramere (Figs. 13-15) and elongate, curved shaft of the left paramere (Figs. 10-12).

Description. Macropterous male. Length (apex of tylus to apices of hemelytra) 3.28-4.10 (all measurements are in millimeters); width across humeral angles of pronotum 0.90-1.14; creamy white or pale brownish yellow general coloration with brown to fuscous markings; surface texture granular, slightly shining, posterior lobe of pronotal disk and propleura punctate; dorsal vestiture of moderately long, suberect, fine simple setae (more densely distributed on head). HEAD. Broad, short, frons and tylus projecting slightly beyond anterior margin of eyes in dorsal view; frons moderately convex, junction with tylus narrowly depressed; vertex broad, transversely flattened, sometimes slightly excavated anteriorly, eyes moderately to strongly stalked, projecting laterally to well beyond anterolateral angles of pronotum, and posteriorly to near level of calli; eye stalks usually broadening distally and projecting above level of vertex; eyes small, slightly compressed dorsoventrally, elongate in dorsal view, occupying only one-third of head height in lateral view; antennae inserted at or below ventral margin of eyes; antennal fossae small, well removed from anterior margin of eyes; antennal segment one about as long as length of eye in dorsal view, length of

segment two less than width of head across eyes, segment three and segment four slightly longer than segment two; all antennal segments cylindrical, linear, clothed with moderately long, suberect simple setae, segment one thicker than segments 2–4, segment two sometimes slightly expanded distally; juga and lora broad, slightly swollen; genal region broad, developed into eye stalk; bucculae short, triangular, buccal cavity subspherical; gula obsolete; labium reaching metacoxae or slightly beyond, segments one and two similar in length, slightly more than twice as long as segments three and four. **PRONOTUM.** More or less trapezoidal with well-defined anterior and posterior lobes; posterior lobe moderately swollen, projecting over base of scutellum; anterior margin with well-developed flattened collar about as broad as or broader than diameter of antennal segment one, posterior margin of collar with moderate to deep transverse depression either side of midline; calli well-developed, usually rising abruptly from collar, reaching lateral margins of pronotum, separated anteromedially by pair of deep circular depressions; lateral margins of disk sinuate, with distinct concavity at level of posterior margin of calli, lateral juncture of collar and calli strongly recessed; posterior margin of disk slightly arcuate medially, broadly rounded laterally; mesoscutum concealed; scutellum weakly elevated, slightly transversely rugulose; metathoracic scent efferent system with tongue-shaped peritremal disc along posterior margin of metaepisternum, disc with weak central canal extending from minute ventral osteole between meso- and metacoxae. **HEMELYTRA.** Elongate, weakly rounded laterally; embolium swollen; cuneus about twice as long as broad, cuneal fracture and incisure weak; membrane with large single cell, posterior margin of cell broadly loop-like. **LEGS.** Femora elongate, slightly flattened to nearly cylindrical; meso- and metafemora nearly linear, sometimes slightly expanded near distal trichobothria; profemora more robust, narrowly rectangular, tapering slightly distally; tibiae cylindrical, protibiae flared distally; femora and tibiae clothed with reclining, pale simple setae; tarsi dilated distally, segments similar in length; claws moderately curved, broad basally with large fleshy disc-like pulvillus attached to inner surface, posteroventral margin of pulvillus with comb-like row of long trichia; parempodia long, setiform. **GENITALIA.** Genital capsule: large, deep, with broad posterodorsally oriented aperture, lateral margins bordering aperture sometimes with spine-like or plate-like sclerite above paramere socket; ventral region between paramere sockets with well-developed sling-like sclerite supporting vesica. Left paramere: sensory lobe well-developed, tapering to broadly U-shaped angle; shaft very long, narrow, variously curved. Right paramere: short, broad, apex rounded or truncate with small dorsal spine or serration. Vesica: ductus seminis entirely membranous; single, weakly curved vesical process with reflexed margins, sometimes nearly tubular, basal region with finger-like process, inner distal margin sometimes with flattened process, apex rounded with multilobed membranous sack originating from small to moderate-sized medial pore.

Female: Macropterous. Similar to male in color, vestiture, and structure except hemelytra slightly more rounded laterally. Genitalia not examined. Only the female of *malayensis* is known (Fig. 1).

Etymology. From the Greek *stylos* (pillar), *ops* (eye), and *miris*, referring to the moderately to strongly stalk-eyed condition of members of the genus; masculine.

Type species. *Stylopomiris malayensis*, new species.

Distribution. South Viet Nam and Malaya (Fig. 2).

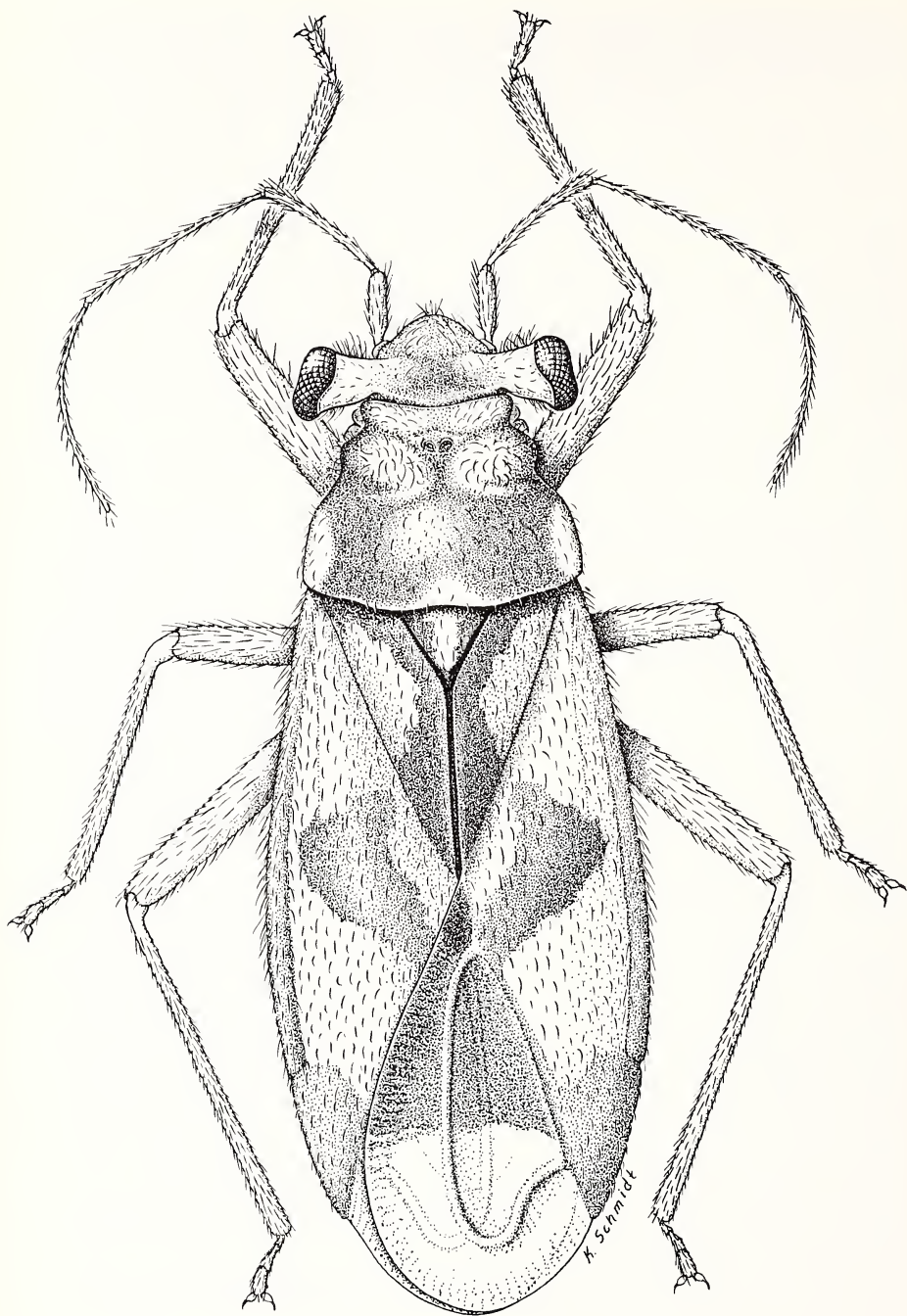


Fig. 1. *Stylopomiris malayensis*, dorsal habitus of female.

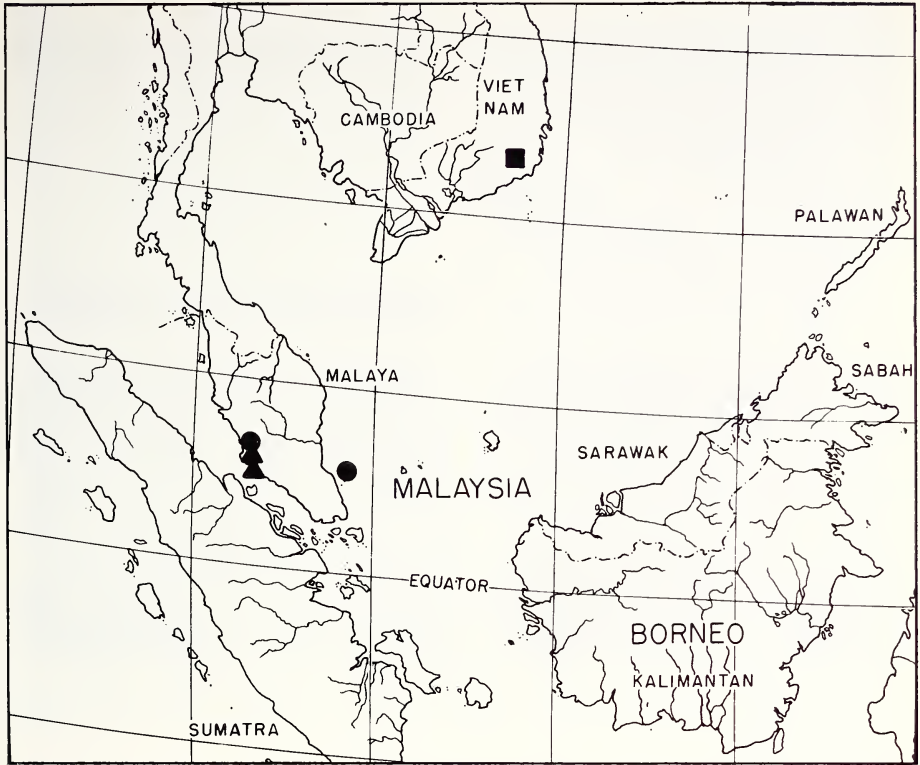
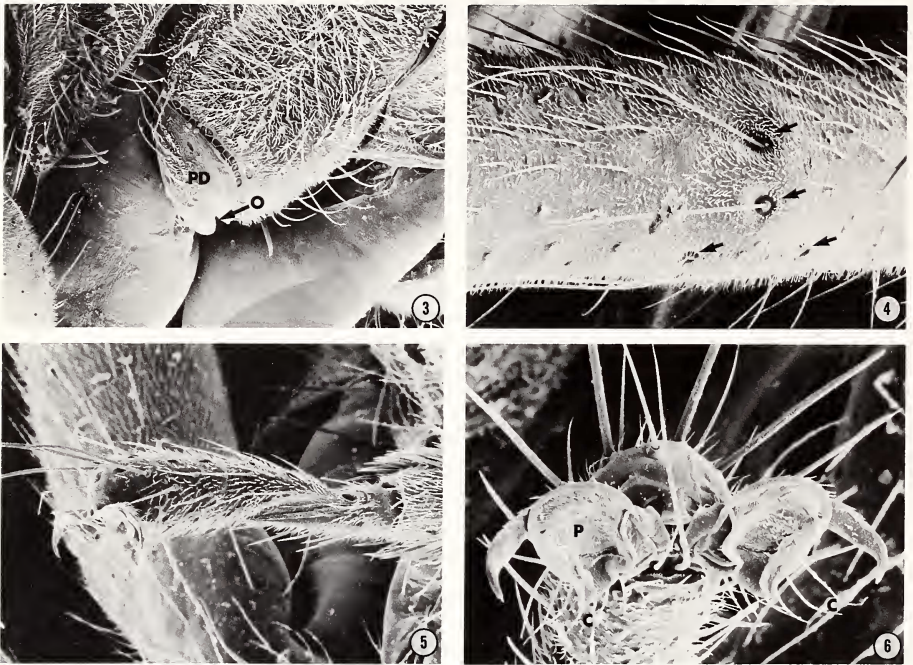


Fig. 2. Distribution of *Stylopomiris froeschneri* ▲, *S. indochinensis* ■, and *S. malayensis* ●.

Discussion. *Stylopomiris* is recognized as belonging to the tribe Eccritotarsini by the structure of the metaepisternal scent efferent system (Fig. 3), metafemur swollen at point of insertion of distal trichobothria (Fig. 4), morphology of the pretarsus (Fig. 6), and structure of the male genitalia, especially the vesica (Figs. 16–18)(see generic description for explanation). It is distinguished from other members of the tribe by the characters given in the generic diagnosis.

The relationship of *Stylopomiris* to other eccritotarsines is uncertain. In Carvalho's (1955) key to genera of Miridae of the World, it runs to couplet six containing *Hesperolabops* Kirkaldy and *Neoleucon* Distant because of the strongly stalked eyes. However, *Stylopomiris* is not closely related to these taxa, or to other New World members of the tribe.

Stylopomiris superficially resembles several Old World genera with stalked eyes (e.g., *Prodromus* Distant, *Thaumastomiris* Kirkaldy, *Stenopterocoris* China), but overall seems more closely related to a complex of genera that share the following attributes: 1) small body size, 2.5–4.6 mm; 2) moderately to strongly inflated posterior lobe of the pronotal disk that projects over the base of the scutellum; 3) paramere sockets with prominent, sometimes inflated, processes on inner margin; and 4) right paramere short and broad. The genera possessing these features are *Eofurium* Poppius, *Ernes-*



Figs. 3–6. *Stylopomiris malayensis*. 3. Metaepisternal scent efferent system (O, osteole; PD, peritremal disk). 4. Distal trichobothria of metafemur. 5. Metatarsus. 6. Pretarsus (P, pulvillus; C, pulvillar comb).

tinus Distant, *Microbryocoris* Poppius, *Myiocapsus* Poppius, and *Palaeofurius* Poppius.

The host plant associations of *Stylopomiris* species are not known.

***Stylopomiris froeschneri*, new species**

Figs. 2, 7, 10, 13, 18

Diagnosis. Recognized by the prominent subtriangulate eye stalks, strongly projecting above level of vertex; length of second antennal segment equal to or slightly greater than width of vertex; width of pronotal collar equal to diameter of antennal segment one; and by the structure of the male genitalia, especially the right paramere with strong basodorsal spine (Fig. 13) and vesica without flattened process on inner distal margin (Fig. 18). Similar to *malayensis* in general coloration but with pronotal disk mostly pale and corium with pair of transverse fuscous marks, one about halfway between cuneal fracture and apices of clavi, and one slightly above level of apices of clavi.

Description. Male. Length 4.10; general coloration and dorsal vestiture as in generic description. HEAD. Width across eyes 1.04–1.08, width of vertex 0.65–0.66; brownish yellow, tylus and apex of frons darker yellowish brown; eyes produced on prominent subtriangulate stalks, strongly elevated above level of vertex; vertex broadly

depressed anteriorly; antennae pale yellow or brownish yellow, inserted well below ventral margin of eye, length of segment one 0.26–0.28, segment two 0.66–0.72; labium reaching slightly beyond apices of metacoxae. PRONOTUM. Posterior width 1.08–1.14; pale brownish yellow; collar, narrow region between and behind calli, and posterior margin of disk, except medially, brown or dark brown; width of collar subequal to diameter of antennal segment one; calli prominent, rising abruptly from depressions behind collar; posterior lobe of disk with longitudinal depressed region bordering lateral margins; scutellum pale with dark patch medially. HEMELYTRA. Creamy white; inner margin and distal half of clavus, anal ridge, and cuneus dark brown; corium with pair of dark transverse marks, one slightly above level of apices of clavi, one equidistant between cuneal fracture and apices of clavi; exocorium yellowish brown with dark brown mark medially; membrane suffused with fuscous to slightly beyond level of cuneal fracture. LEGS. Femora yellowish brown, slightly darker distally; tibiae pale brownish yellow; tarsi and claws yellowish brown. GENITALIA. Figures 7, 10, 13, 18. Right paramere with strong dorsal spine basally (Fig. 13).

Female: Unknown.

Etymology. Named for Richard C. Froeschner.

Distribution. Figure 2. Malaya.

Holotype. ♂ MALAYSIA. *Malaya. Selangor Prov.:* Weld Hill F. R., Kuala Lumpur, October 8, 1932, H. M. Pendlebury collector; deposited in the British Museum (Natural History), London.

Paratypes. ♂ (poor condition, discolored and with hemelytra missing), MALAYSIA, *Malaya, Negri Sembilan Prov.,* Port Dickson, March 1, 1935, H. M. Pendlebury (BM).

***Stylopomiris indochinensis*, new species**

Figs. 2, 8, 12, 14, 16

Diagnosis. Recognized by the less prominent eye stalks, not projecting above level of vertex, antennal segment two nearly as long as width of head across eyes; pronotal collar only slightly broader than diameter of antennal segment one; antennae and legs brownish; hemelytra extensively darkened; and by the structure of the male genitalia, especially the extremely long, thin shaft of the left paramere (Fig. 12), the kidney-shaped right paramere (Fig. 14), and the large sling-like support for the vesica between the paramere sockets (Fig. 8).

Description. Male. Length 3.90; brownish general coloration; dorsal vestiture as in generic description. HEAD. Width across eyes 0.86, width of vertex 0.51; yellowish brown; vertex, frons, and tylus fuscous; eyes less strongly stalked, not projecting above level of vertex; antennae brown, segment one more yellowish brown, inserted at level of ventral margin of eyes, length of segment one 0.26, segment two 0.71; labium reaching well beyond apices of metacoxae. PRONOTUM. Posterior width 1.06; grayish yellow, posterolateral angles broadly fuscous, calli brown; collar slightly broader than diameter of antennal segment one; calli moderately developed, rising gradually from collar; scutellum fuscous, with weak depression either side before narrowly pale apex. HEMELYTRA. Clavus fuscous except base, inner margin bordering scutellum, and apex narrowly pale; corium broadly darkened medially, basal

and apical fourths and inner margin pale; cuneus and distal two-thirds of exocorium dark brown; membrane lightly suffused with fuscous proximally. LEGS. Femora yellowish brown basally, brown or dark brown distally; tibiae brown or yellowish brown, usually lighter apically; tarsi yellowish brown, claws golden brown. GENITALIA. Figures 8, 12, 14, 16. Left paramere with extremely long, thin shaft (Fig. 12).

Female: Unknown.

Etymology. Named for its occurrence in Indochina.

Distribution. Figure 2. South Viet Nam.

Holotype. ♂ VIET NAM. Fyan [Ngoc Son], 1,200 m, July 11–August 9, 1961, N. R. Spencer collector; deposited in the B. P. Bishop Museum, Honolulu.

***Stylopomiris malayensis*, new species**

Figs. 1–6, 9, 11, 15, 17

Diagnosis. Recognized by the prominent subtriangulate eye stalks, slightly produced above level of vertex; length of second antennal segment distinctly less than width of vertex; pronotal collar nearly twice as broad as diameter of antennal segment one; and by the structure of the male genitalia, especially the large acuminate process on the left lateral margin of the genital capsule (Fig. 9), and shape of the parameres (Figs. 11, 15). Distinguished from *froeschneri* by its smaller size, extensively darkened pronotal disk, short second antennal segment, less strongly elevated eye stalks, broad pronotal collar, and male genitalia.

Description. Male. Length 3.28–3.32; general coloration and dorsal vestiture as in generic description. HEAD. Width across eyes 0.99–1.00, width of vertex 0.66–0.68; brownish yellow, underparts slightly darker, apex of frons and tylus brown; eyes produced on prominent subtriangulate stalks, only slightly produced above level of vertex; antennae yellowish brown, inserted below ventral margin of eye; length of segment one 0.22–0.24, segment two 0.52; labium reaching slightly beyond apices of metacoxae. PRONOTUM. Posterior width 0.90–0.91; brown or dark brown; collar, posterolateral angles, and posterior margin mostly pale; collar nearly twice as broad as diameter of antennal segment one; calli prominent, rising abruptly from collar; scutellum dark brown, lighter yellowish brown medially. HEMELYTRA. Creamy white or pale yellow; clavus with basal fourth, inner margin, and apical third fuscous; corium with broad oblique fuscous patch reaching from anal ridge anteriorly to exocorium at level of apices of clavi; cuneus and most of exocorium brown or dark brown; membrane suffused with fuscous to near level of apex of cuneus. LEGS. Pale yellow or brownish yellow, only claws darker golden brown. GENITALIA. Figures 9, 11, 15, 17. Genital capsule with large, acuminate process on left lateral margin of aperture (Fig. 9).

Female: Figure 1. Similar to male in color, vestiture, and structure except hemelytra slightly more rounded laterally, calli sometimes pale on inner half, scutellum more broadly pale medially and apically, exocorium pale, and fuscous patch on corium not reaching costal margin (rarely extending laterally beyond radial vein). Length 3.50–3.65; width of head across eyes 1.00–1.03, width of vertex 0.68–0.69; length of antennal segment one 0.24–0.25, segment two 0.52; posterior width of pronotum 0.94–0.96.



Figs. 7-18. Male genitalic structures of *Stylopomiris* species. 7-9. Genital capsule, left lateral view. 7. *froeschneri*. 8. *indochinensis*. 9. *malayensis*. 10-12. Left paramere, lateral view. 10. *froeschneri*. 11. *malayensis*. 12. *indochinensis*. 13-15. Right paramere, lateral view. 13. *froeschneri*. 14. *indochinensis*. 15. *malayensis*. 16-18. Vesica (V) and phallobase (P) of aedeagus. 16. *indochinensis*. 17. *malayensis*. 18. *froeschneri*.

Etymology. Named for its occurrence in the state of Malaya.

Distribution. Figure 2. Malaya.

Holotype. ♂ MALAYSIA. **Malaya.** *Selangor Prov.*: Connaught Bridge, March 14, 1958, T. C. Maa collector; deposited in the B. P. Bishop Museum, Honolulu.

Paratypes. MALAYSIA. **Malaya.** *Selangor Prov.*: ♂, same data as holotype (BISH).
Tioman Is.: 7♀, March 19, 1984, J. H. Martin (AMNH, BM).

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